

REMARKS/ARGUMENTS

As the Examiner is aware, this case is part of an original "bulk filing" by Motorola. Special IDS procedures have been approved for these cases, and in this case several 1449's have kindly been considered. A supplemental IDS filing is also included with this filing.

The rejection of the Claims is now moot in view of the amendment to the claims, specifying a novel and unobvious semiconductor structure, as follows:

a monocrystalline silicon substrate;
an amorphous oxide material in contact with the monocrystalline substrate;
a monocrystalline perovskite oxide material selected from the group consisting of alkaline earth metal titanates, alkaline earth metal zirconates, alkaline earth metal hafnates, alkaline earth metal tantalates, alkaline earth metal ruthenates, alkaline earth metal niobates, alkaline earth metal vanadates, alkaline earth metal tin based perovskites, lanthanum aluminate, lanthanum scandium oxide and mixtures thereof contacting the amorphous oxide material; and
a monocrystalline compound semiconductor material overlying the monocrystalline perovskite oxide material.

this structure being claimed in combination with optional templates, buffers, etc.

In this regard, the claims herein have been amended in accordance with discussions held between Applicants and the Patent Office, and these amendments place this case in condition for allowance by describing, in addition to other patentable features, a novel and unobvious semiconductor structure which is, itself, both novel and unobvious. Note, for example, the requirement that the amorphous oxide material be in contact with the monocrystalline substrate, the requirement that the monocrystalline perovskite oxide contact

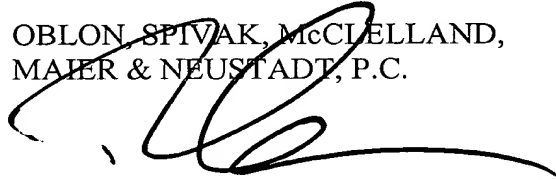
the amorphous oxide material, and the lack of a metal nitride layer. These amendments have resulted from a study of the references cited in the various IDSs in this "bulk filing" and from associated discussions with Examiner Baumeister, SPE Chaudhury, SPE Flynn, SPE Lee, and others at the PTO. None of Calviello or Jia, either alone or in combination, describe the semiconductor "stack" as now claimed herein.

As noted above, the amendment to the rejected claims places this case in condition for allowance. Accordingly, early notice to this effect is respectfully requested.

With regard to the double patenting rejection, the Office is kindly holding these rejections in abeyance until the indication of allowable subject matter. In this regard, Applicant is now preparing their response to the double patenting rejections in this series of cases, which is expected to address all such rejections.

Respectfully submitted,

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